

Claims

1. A belt conveyor for transporting loose tobacco materials, comprising a transporting belt, equipped with a vibratory sub-assembly with independent driving means, a feeding channel being placed over the transporting belt, characterized in that the vibratory sub-assembly of the transporting belt (3) has form of at least two separate vibratory portions (V1, V2, V3), each comprising at least one roller (10a) having eccentric elements (10b) and symmetrically arranged counterweights (10c), and in case of using eccentric elements (10b) of the same active radii on the rollers (10a) of all the vibratory portions (V1, V2, V3), the distance between the transporting belt (3) and the axes of the rollers (10a) of the starting vibratory portion in which feeding of the loose tobacco material takes place is minimal, and the distance from the transporting belt (3) to the axes of the rollers (10a) of successive vibratory portions (V2, V3) is an increasing function, and when the

axes of the rollers (10a) of all the vibratory portions (V1, V2, V3) are at the same distance from the transporting belt (3) then the active radius of the eccentric elements (10b) of the starting vibratory portion (V1) is the biggest one, and the radius decreases for the eccentric elements (10b) of the rollers (10a) of successive vibratory portions (V2, V3), and each of the vibratory portions (V1, V2, V3) has separate adjusting elements providing independent adjustment of magnitude and direction of a vibration amplitude vector, and has also separate adjusting elements providing independent adjustment of frequency of the transporting belt vibrations, irrespective of speed of the transporting belt (3).

2. A belt conveyor according to claim 1 characterized in that each of the vibratory portions (V1, V2, V3) is equipped with separate adjusting elements providing adjustment of distance and inclination of each of the vibratory portions (V1, V2, V3) relatively to the transporting belt (3), and the rollers (10a) of each vibratory portion (V1, V2, V3) are connected by pulleys (11) with separate driving arrangements, separate relatively to the driving arrangement which drives the transporting belt (3), the driving arrangements of the vibratory portions (V1, V2, V3) are equipped with adjusting elements providing adjustment of rotational speed of motors forming a part of these driving arrangements.

3. A belt conveyor according to claim 1 or 2 characterized in that an additional belt conveyor (12) comprising vibratory portions is mounted over the transporting belt (3).

4. A belt conveyor according to claim 1 or 2 characterized in that pressure plate comprising vibratory portions is mounted swingingly over the transporting belt (3).

5. A belt conveyor according to claim 1 or 2 characterized in that a stationary or rotary scraper bucket (13) is mounted over the ending portion of the transporting belt (3), equipped with adjusting elements providing adjustment of the height of the scraper bucket (13) relative to the surface of the transporting belt (3) and adjustment of the position of the scraper bucket (13) relative to the surface of the transporting belt (3) along the horizontal axis (X) extending along the direction of the transporting belt (3) movement.